PATENT ABSTRACTS OF JAPAN

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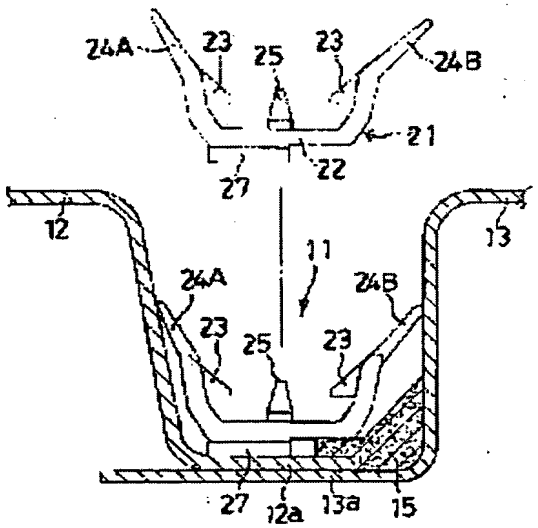
(54) MOULDING ATTACHING CLIP AND STRUCTURE FOR ATTACHING MOULDING ATTACHING CLIP

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a moulding attaching clip which can be easily adhered and fixed in the center in a width direction in a recessed portion.

SOLUTION: In this moulding attaching clip 21, a holding portion 23 for a portion 32 to be held for a moulding attaching holder 31 for mounting the moulding 41, is provided on a base portion 22 adhered to and fixed on a bottom of a recessed portion 11 placed in a vehicle. A plurality of pairs of elastic pieces 24A, 24B elastically in contact with both side surfaces forming a recessed portion 11 are placed on both sides of a base portion 22.



LEGAL STATUS

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* NOTICES *

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CLAIMS

[Claim(s)]
[Claim 1] The clip for mall attachment characterized by what the elastic piece which **** on each side face which forms said crevice, and which countered in the clip for mall attachment with which the attaching part holding a mall was prepared in the substrate section which is pasted up on the bottom of a crevice and is fixed was prepared for in the both sides of said substrate section.
[Claim 2] The clip for mall attachment characterized by what two or more said elastic pieces were prepared for in the both sides of said substrate section, respectively in the clip for mall attachment according to claim 1.
[Claim 3] The clip for mall attachment characterized by what the guide side guided to said elastic piece on the side face of said crevice was established for in the clip for mall attachment according to claim 1 or 2.
[Claim 4] The clip for mall attachment characterized by what said elastic piece was prepared for in the both sides of said substrate section by the pair in the clip for mall attachment given in any 1 term of claim 1 to claim 3.
[Claim 5] The clip for mall attachment characterized by what the elastic force of said elastic piece was changed for by the 1 side and side side else in the clip for mall attachment given in any 1 term of claim 1 to claim 4.
[Claim 6] The substrate section which the clip for mall attachment is pasted up on the bottom of a crevice, and is fixed, and the attaching part which is prepared in this substrate section and holds a mall, It is prepared in the both sides of said substrate section, and constitutes from an elastic piece which **** on each side face which forms said crevice, and which countered. Attachment structure of the clip for mall attachment characterized by what you inserted said clip for mall attachment into said crevice, making said elastic piece **** to the both-sides side of said crevice, and was made to paste up and fix said substrate section to the bottom of said crevice.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] This invention relates to the attachment structure of the clip for mall attachment which the clip for mall attachment for attaching a mall in the crevice where it was prepared in the car, and the both ends of a mall are made to **** to the both-sides side which forms a crevice.
[0002]
[Description of the Prior Art] What prepared the piece of positioning to which a tip contacts the side face which forms the crevice of a car, for example, the main roof panel, and a side roof panel as a conventional clip for mall attachment in the 1 side of the substrate section which pastes up on the bottom of a crevice and is made to fix is known. This clip for mall attachment can be made to position and paste up and fix to a position, i.e., the position of the cross direction of a crevice, from that side face by making the tip of the piece of positioning contact to the predetermined side face which forms a crevice.
[0003]
[Problem(s) to be Solved by the Invention] Since the piece of positioning was prepared in the 1 side of the substrate section, the conventional clip for mall attachment was not able to be made to paste up and fix to the core (core of the cross direction in the core of the cross direction in the top side of a crevice, and the opening edge of a crevice) of the cross direction of a crevice of the thing which while forms a crevice, and can be pasted up and can be made to position and fix to a position from a side face. Namely, since the width of face of a crevice stops being fixed with the junction error generated when joining the edge section of the main roof panel, and the edge section of a side roof panel even if it is going to make width of face of a crevice regularity, Even if while forming a crevice makes the clip for mall attachment paste up and fix to the bottom of a crevice on the basis of a side face, it becomes impossible to locate the clip for mall attachment at the core of a crevice.
[0004] If the clip for mall attachment cannot be made to paste up and fix to the core of a crevice, when making the both ends of a mall **** on the main roof panel and a side roof panel, a mall is made to engage with the clip for mall attachment certainly, and it becomes impossible to attach and it becomes impossible thus, to make the both ends of a mall **** on the main roof panel and a side roof panel.
[0005] This invention was made in order to cancel un-arranging [which was described above], and it offers the attachment structure of the clip for mall attachment where the clip for mall attachment which can be made to paste up and fix to the core of the cross direction of a crevice simply, and the both ends of a mall can be made to **** to the both-sides side which forms a crevice certainly.
[0006]
[Means for Solving the Problem] This invention prepares the elastic piece which **** on each side face which forms a crevice, and which countered in the both sides of the substrate section in the clip for mall attachment with which the attaching part holding a mall was prepared in the substrate section which is pasted up on the bottom of a crevice and is fixed. And it is desirable, to prepare an elastic piece in the both sides of the substrate section by the pair, or to change the elastic force of an elastic piece by the 1 side and side side else. [preparing two or more elastic pieces in the both sides of the substrate section, respectively] [establishing the guide side guided to an elastic piece on the

side face of a crevice]
[0007] Moreover, the attachment structure of the clip for mall attachment of this invention The substrate section which the clip for mall attachment is pasted up on the bottom of a crevice, and is fixed, and the attaching part which is prepared in this substrate section and holds a mall, It is prepared in the both sides of the substrate section, and constitutes from an elastic piece which **** on each side face which forms a crevice, and which countered, and the clip for mall attachment is inserted into a crevice, making an elastic piece **** to the both-sides side of a crevice, and the substrate section is made to paste up and fix to the bottom of a crevice.
[0008]
[Embodiment of the Invention] Hereafter, the operation gestalt of this invention is explained based on drawing. The top view of the clip for mall attachment whose drawing 1 is 1 operation gestalt of this invention, The front view of the clip for mall attachment which showed drawing 2 to drawing 1 , the bottom view of the clip for mall attachment which showed drawing 3 to drawing 1 , The left side view of the clip for mall attachment which showed drawing 4 to drawing 1 , the right side view of the clip for mall attachment which showed drawing 5 to drawing 1 , the sectional view according [drawing 6] to the A-A line of drawing 1 , the sectional view according [drawing 7] to the B-B line of drawing 1 , and drawing 8 are the sectional views by the C-C line of drawing 1 . In addition, the rear view of the clip for mall attachment becomes a front view and bilateral symmetry.
[0009] In these drawings the clip 21 for mall attachment made of synthetic resin Plane view by the upper limit inside the substrate section 22 of the shape of a KO typeface which transverse-plane (tooth back) ** opened wide upwards in the rectangle, and this substrate section 22 Rather than the both ends of the direction of a long side [a longitudinal direction (it sets to drawing 1 and is the vertical direction) and the longitudinal direction (it sets to drawing 9 mentioned later, and is a cross direction) of the crevice 11 mentioned later], for a while inside The attaching part 23 which was made to counter in the direction of a shorter side [the direction of a short hand (for it to set to drawing 1 and to be a longitudinal direction) and the direction of a short hand of a crevice 11 (for it to set to drawing 9 and to be a longitudinal direction)], and was prepared in one by the pair, It consists of two or more elastic pieces 24A and 24B which it was made to counter in the direction of a shorter side in the both ends and center of the direction of a long side of the substrate section 22, and were prepared in them in one by the pair so that it might go up going outside, and a locating lug 25 prepared in the core of the top face of the substrate section 22 in one.
[0010] In the above-mentioned substrate section 22, it extracts for extracting metal mold with an attaching part 23 into the part of the bottom which counters. Hole 22a, Long hole 22b for being located in the both sides of a locating lug 25, extending to a longitudinal direction, and enabling vertical movement of a locating lug 25, Lobe 22c for a mark made to project to a longitudinal direction and 22d of steps cut and lacked to the longitudinal direction by predetermined width of face (width of face shorter than the full one half of a bottom) from the 1 side [bottom] side (it sets to drawing 2 and is a right end) are prepared in the center of the direction of a short hand of the end (it sets to drawing 1 and is upper limit) of a longitudinal direction.
[0011] Moreover, each above-mentioned attaching part 23 is set to inclined plane (guide side) 23a which descends to the inside so that it may show the attaching part 32-ed of the holder 31 for mall attachment which a top face mentions later to the bottom side of the substrate section 22. Above-mentioned elastic piece 24A and elastic piece 24B change a tilt angle, and have changed elastic force. And the side corresponding to the side face of a crevice 11 of the elastic pieces 24A and 24B (an opening edge is also included.) is made into the guide side (inclined plane) guided on the side face of a crevice 11.
[0012] The explanatory view in which drawing 9 attaches the clip for mall attachment in the crevice of a car, and drawing 10 are explanatory views which attach the holder for mall attachment, and a mall in the clip for mall attachment attached in the crevice of a car.
[0013] In these drawings, the crevice 11 in which the clip 21 for mall attachment is attached is formed by welding edge section 12a of the main roof panel 12, and edge section 13a of the side roof panel 13. And the both-sides side of a crevice 11 is formed by the main roof panel 12 and the side roof panel 13, and tilt angles differ.
[0014] A sealant 15 carries out the seal of the part for the joint of edge section 12a of the main roof

panel 12, and edge section 13a of the side roof panel 13. The double faced adhesive tape 27 as a binder makes the substrate section 22 of the clip 21 for mall attachment paste up and fix to the bottom of a crevice 11.

[0015] The holder 31 for mall attachment made of synthetic resin is formed in the core of the inferior surface of tongue of the attaching part 32-ed held at the attaching part 23 of the clip 21 for mall attachment, and this attaching part 32-ed to a longitudinal direction, and consists of attaching parts 33 holding the attaching part 43-ed of the mall 41 mentioned later. Held claw part 32a is prepared in the both sides of the longitudinal direction bottom, the locating lug 25 of the clip 21 for mall attachment is made to correspond to the core of a bottom, and positioning crevice 32c is prepared in the above-mentioned attaching part 32-ed.

[0016] And the bottom both ends of the longitudinal direction of held claw part 32a are set to inclined plane (guide side) 32b extended to the bottom. Furthermore, the bottom both ends of the longitudinal direction of an attaching part 33 are extended to the bottom, and are set to inclined plane 33a attained to the attaching part 32-ed. Let the die length of the longitudinal direction of this holder 31 for mall attachment be the same die length as the clip 21 for mall attachment. In addition, the holder 31 for mall attachment is fabricated by bilateral symmetry.

[0017] The wrap mall 41 is established in the core of the inferior surface of tongue of the mall section 42 to which a both-ends edge **** a crevice 11 on the main roof panel 12 or the side roof panel 13 to form, and this mall section 42 in the crevice 11 made of synthetic resin to a longitudinal direction, and it consists of attaching parts 43-ed held at the attaching part 33 of the holder 31 for mall attachment. Held claw part 43a is prepared in the both sides of the longitudinal direction bottom at the above-mentioned attaching part 43-ed. And the bottom both ends of the longitudinal direction of held claw part 43a are set to inclined plane (guide side) 43b extended to the bottom. In addition, although a mall 41 is a long picture and is fabricated by bilateral symmetry, it may form the attaching part 43-ed only in a need part.

[0018] Next, attachment of a mall 41 is explained. First, if attachment of the clip 21 for mall attachment is explained, the whole surface of a double faced adhesive tape 27 will be pasted up on the lower field (the field which forms 22d of steps, and a different field) of the bottom of the clip 21 for mall attachment. In addition, let width of face of a double faced adhesive tape 27 be the same width of face as the field on which this double faced adhesive tape 27 is pasted up.

[0019] And as a two-dot chain line shows, while locating elastic piece 24A in drawing 9 at the main roof panel 12 side, elastic piece 24B is located in the side roof panel 13 side. Next, since it **** while elastic piece 24A is guided to the main roof panel 12 in respect of a guide, and ****(ing), and elastic piece 24B is guided to the side roof panel 13 in respect of a guide if the substrate section 22 is made parallel with the bottom of a crevice 11 and the clip 21 for mall attachment is inserted into a crevice 11, the clip 21 for mall attachment can be inserted into a crevice 11.

[0020] Thus, since the elastic force of the elastic pieces 24A and 24B is changed so that it may be made to correspond to the tilt angle of the main roof panel 12 and the side roof panel 13 and the substrate section 22 may be located at the core of the cross direction of a crevice 11 when the clip 21 for mall attachment is inserted into a crevice 11, the substrate section 22 can be made to make located and paste up and fix to the core of the cross direction of a crevice 11, as a continuous line shows to drawing 9 .

[0021] Next, if positioning crevice 32c is made to correspond to drawing 10 at a locating lug 25 as a two-dot chain line shows and the attaching part 32-ed of the holder 31 for mall attachment is pressed to between the attaching parts 23 of the clip 21 for mall attachment An attaching part 23 is overcome, held claw part 32a being guided in inclined planes 23a and 32b, and making an attaching part 23 extend, and a locating lug 25 contacts the bottom of the attaching part 32-ed while being entered and engaged in positioning crevice 32c.

[0022] Thus, if held claw part 32a overcomes an attaching part 23, since the substrate section 22 will return to the original condition with own elasticity and an attaching part 23 will engage with held claw part 32a, the holder 31 for mall attachment can be made to hold to the clip 21 for mall attachment. Since a locating lug 25 is entered and engaged in positioning crevice 32c at this time, the holder 31 for mall attachment is positioned so that it may not move to the longitudinal direction of the clip 21 for mall attachment.

[0023] Next, if the attaching part 43-ed is made to correspond to drawing 10 between attaching parts 33 as a two-dot chain line shows and a mall 41 is pressed, held claw part 43a is guided by inclined plane 43b, and it will overcome an attaching part 33, making an attaching part 33 extend. Thus, if held claw part 43a overcomes an attaching part 33, since an attaching part 33 will return to the original condition with own elasticity and will engage with held claw part 43a, a mall 41 can be made to hold to the holder 31 for mall attachment at drawing 10 , as a continuous line shows. At this time, the both-ends edge of the mall section 42 is ****(ed) to the both-sides side (the main roof panel 12 and side roof panel 13) of a crevice 11, and carries out the seal of the crevice 11 for a crevice 11 with a wrap.

[0024] Since according to 1 operation gestalt of this invention the elastic pieces 24A and 24B were made to correspond to the longitudinal direction of a crevice 11 and were prepared in the both sides of the substrate section 22 as described above, the longitudinal direction of a crevice 11 can be met and the clip 21 for mall attachment can be made to paste up and fix to the core of the cross direction of a crevice 11 simply, when the elastic pieces 24A and 24B **** to the both-sides side of a crevice 11. And since two or more elastic pieces 24A and 24B were formed in the both sides of the substrate section 22, the longitudinal direction of a crevice 11 can be met and the clip 21 for mall attachment can be made to paste up and fix to the core of the cross direction of a crevice 11 simply, when two or more elastic pieces 24A and 24B **** to the both-sides side of a crevice 11.

[0025] Moreover, since the elastic pieces 24A and 24B were formed in the both sides of the substrate section 22 by the pair, the clip 21 for mall attachment can be made to paste up and fix to the core of the cross direction of a crevice 11 certainty and simply. And when the both-sides side which forms a crevice 11 is not bilateral symmetry, the clip 21 for mall attachment can be made to paste up and fix to the core of the cross direction of a crevice 11 simply by making the elastic force of the elastic pieces 24A and 24B correspond to the inclination of a both-sides side, and changing it, since the elastic force of elastic piece 24A and elastic piece 24B was changed. Moreover, since the guide side guided to the elastic pieces 24A and 24B on the side face of a crevice 11 was established, the clip 21 for mall attachment can be made to insert smoothly into a crevice 11 by making a guide side contact the side face of a crevice 11.

[0026] Furthermore, since lobe 22c for a mark was prepared in the substrate section 22, a direction can be inserted to prevent mistakes, and can be pasted up and the clip 21 for mall attachment can be made to fix into a crevice 11. Moreover, since the locating lug 25 was formed in the clip 21 for mall attachment and positioning crevice 32c with which this locating lug 25 engages was prepared in the holder 31 for mall attachment, it can position and attach so that the holder 31 for mall attachment may not be moved to the clip 21 for mall attachment.

[0027] Whether it is one at a time or the elastic pieces 24A and 24B do not form the elastic pieces 24A and 24B by the pair, it can paste up and the clip 21 for mall attachment can be made to position and fix them to the core of the cross direction of a crevice 11 in the above-mentioned operation gestalt, although the example which formed two or more pairs of elastic pieces 24A and 24B in the both sides of the substrate section 22 was shown. Moreover, although the example which changed the tilt angle was shown in order to change the elastic force of elastic piece 24A and elastic piece 24B, elastic force may be changed by changing the thickness of elastic piece 24A and elastic piece 24B.

[0028] Furthermore, when the both-sides side of a crevice 11 is bilateral symmetry, it can paste up and the clip 21 for mall attachment can be made to position and fix to the core of the cross direction of a crevice 11 by making the same elastic force with the elastic pieces 24A and 24B, although the example which changed the elastic force of elastic piece 24A and elastic piece 24B was shown. Moreover, although the example which attaches a mall 41 was shown in the clip 21 for mall attachment through the holder 31 for mall attachment, you may be the configuration to attach direct picking about a mall 41 at the clip 21 for mall attachment.

[0029]

[Effect of the Invention] As mentioned above, since the elastic piece was prepared in the both sides of the substrate section, the longitudinal direction of a crevice can be met and the clip for mall attachment can be made according to the clip for mall attachment of this invention, to paste up and fix to the core of the cross direction of a crevice simply, when an elastic piece **** to the both-sides

side of a crevice. And since two or more elastic pieces were prepared in the both sides of the substrate section, the longitudinal direction of a crevice can be met and the clip for mall attachment can be made to paste up and fix to the core of the cross direction of a crevice simply, when two or more elastic pieces **** to the both-sides side of a crevice.

[0030] Moreover, since the guide side guided to an elastic piece on the side face of a crevice was established, the clip for mall attachment can be made to insert smoothly into a crevice by making a guide side contact the side face of a crevice. And since the elastic piece was prepared in the both sides of the substrate section by the pair, the clip for mall attachment can be made to paste up and fix to the core of the cross direction of a crevice certainty and simply. Moreover, when the both-sides side which forms a crevice is not bilateral symmetry, the clip for mall attachment can be made to paste up and fix to the core of the cross direction of a crevice simply by making the elastic force of an elastic piece correspond to the inclination of a both-sides side, and changing it, since the elastic force of an elastic piece was changed by the 1 side and side side else.

[0031] Moreover, since the clip for mall attachment was inserted into the crevice and the substrate section was made to paste up and fix to the bottom of a crevice according to the attachment structure of the clip for mall attachment of this invention, making an elastic piece **** to the both-sides side where the crevice countered, the clip for mall attachment can be made to paste up and fix to the core of the cross direction of a crevice simply.

[Translation done.]

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] It is the top view of the clip for mall attachment which is 1 operation gestalt of this invention.
[Drawing 2] It is the front view of the clip for mall attachment shown in drawing 1 .
[Drawing 3] It is the bottom view of the clip for mall attachment shown in drawing 1 .
[Drawing 4] It is the left side view of the clip for mall attachment shown in drawing 1 .
[Drawing 5] It is the right side view of the clip for mall attachment shown in drawing 1 .
[Drawing 6] It is a sectional view by the A-A line of drawing 1 .
[Drawing 7] It is a sectional view by the B-B line of drawing 1 .
[Drawing 8] It is a sectional view by the C-C line of drawing 1 .
[Drawing 9] It is the explanatory view which attaches the clip for mall attachment in the crevice of a car.
[Drawing 10] It is the explanatory view which attaches the holder for mall attachment, and a mall in the clip for mall attachment attached in the crevice of a car.
[Description of Notations]
11 Crevice
12 The Main Roof Panel
12a Edge section
13 Side Roof Panel
13a Edge section
15 Sealant
21 Clip for Mall Attachment
22 Substrate Section
22a Extract and it is a hole.
22b Long hole
22c The lobe for a mark
22d Step
23 Attaching Part
23a Inclined plane
24A Elastic piece
24B Elastic piece
25 Locating Lug
27 Double Faced Adhesive Tape
31 Holder for Mall Attachment
32 Attaching Part-ed
32a A held claw part
32b Inclined plane
32c Positioning crevice
33 Attaching Part
33a Inclined plane
41 Mall
42 Mall Section

43 Attaching Part-ed
43a A held claw part
43b Inclined plane

[Translation done.]

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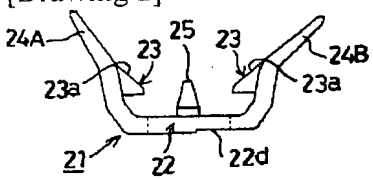
DRAWINGS

[Drawing 2]



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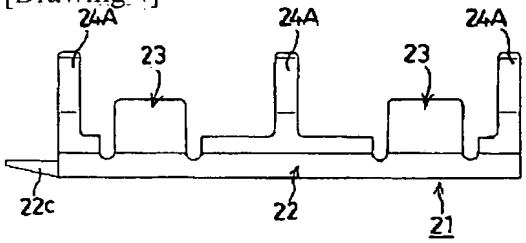

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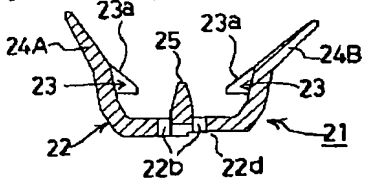

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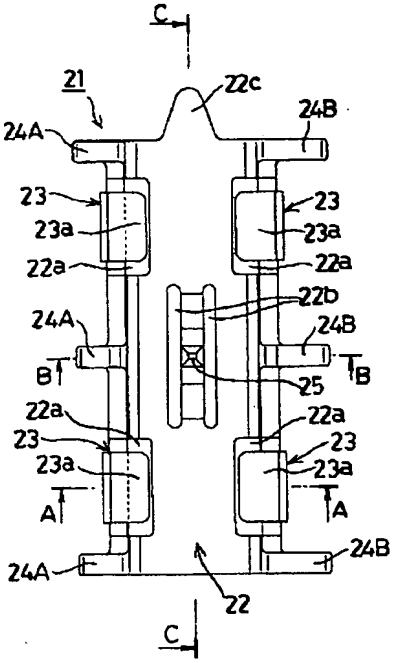

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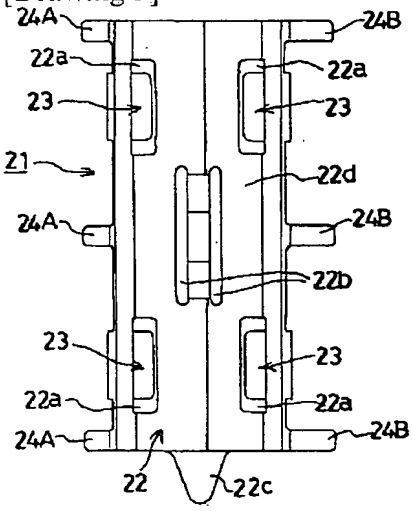

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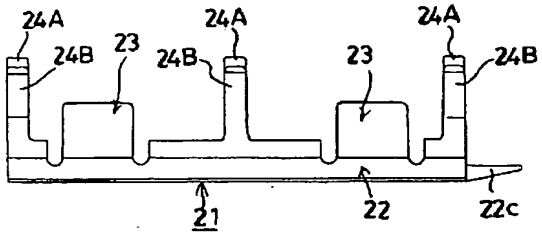

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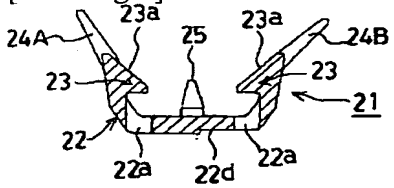
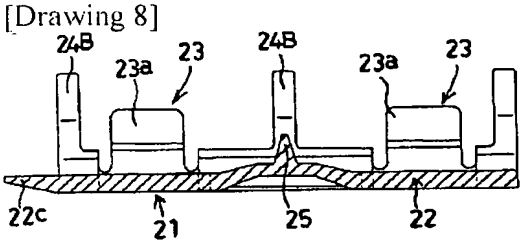
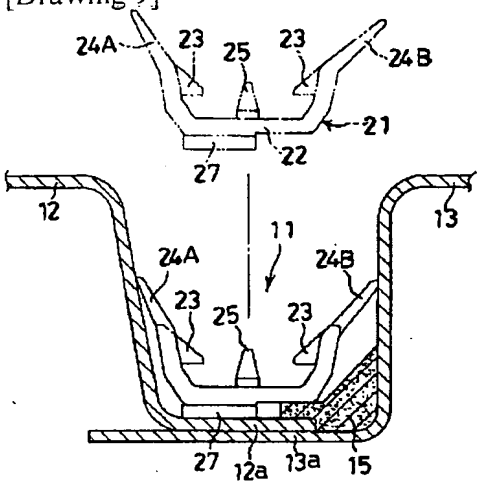


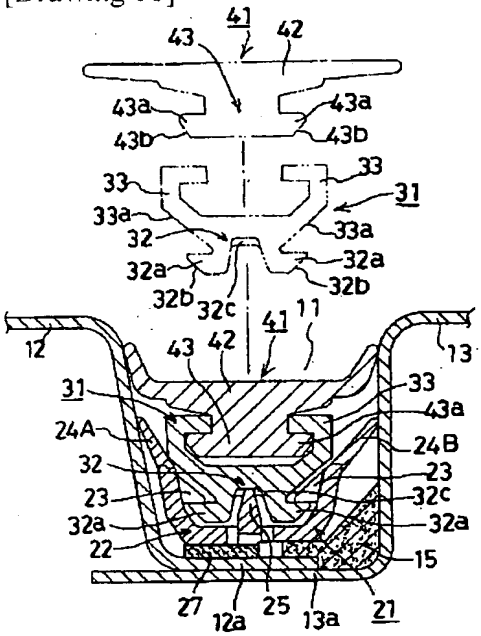
[Drawing 8]



[Drawing 9]



[Drawing 10]



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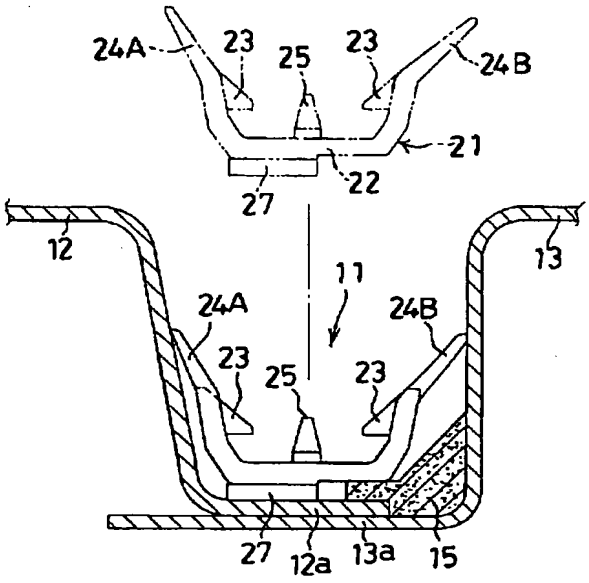
(54)【発明の名称】　モール取付用クリップおよびモール取付用クリップの取付構造

(57)【要約】
【課題】　凹部の幅方向の中心に、簡単に接着、固定させることのできるモール取付用クリップを提供する。
【解決手段】　車両に設けられた凹部１１の底に接着、固定される基板部２２に、モール４１を取り付けるモール取付用ホルダ３１の被保持部３２を保持する保持部２３が設けられたモール取付用クリップ２１において、凹部１１を形成する両側面に弾接する弾性片２４Ａ，２４Ｂを、基板部２２の両側に複数対設ける。



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【特許請求の範囲】

【請求項１】　凹部の底に接着、固定される基板部に、モールを保持する保持部が設けられたモール取付用クリップにおいて、

前記凹部を形成する対向した各側面に弾接する弾性片を、前記基板部の両側に設けた、

ことを特徴とするモール取付用クリップ。

【請求項２】　請求項１に記載のモール取付用クリップにおいて、

前記弾性片を、前記基板部の両側にそれぞれ複数設けた、ことを特徴とするモール取付用クリップ。

【請求項３】　請求項１または請求項２に記載のモール取付用クリップにおいて、

前記弾性片に、前記凹部の側面でガイドされるガイド面を設けた、

ことを特徴とするモール取付用クリップ。

【請求項４】　請求項１から請求項３のいずれか１項に記載のモール取付用クリップにおいて、

前記弾性片を、前記基板部の両側に対で設けた、

ことを特徴とするモール取付用クリップ。

【請求項５】　請求項１から請求項４のいずれか１項に記載のモール取付用クリップにおいて、

前記弾性片の弾性力を、一側側と他側側とで異ならせた、

ことを特徴とするモール取付用クリップ。

【請求項６】　モール取付用クリップを、凹部の底に接着、固定される基板部と、この基板部に設けられ、モールを保持する保持部と、前記基板部の両側に設けられ、前記凹部を形成する対向した各側面に弾接する弾性片とで構成し、

前記弾性片を前記凹部の両側面へ弾接させながら前記モール取付用クリップを前記凹部内へ挿入し、前記基板部を前記凹部の底に接着、固定させた、

ことを特徴とするモール取付用クリップの取付構造。

【発明の詳細な説明】

【０００１】

【発明の属する技術分野】この発明は、例えば車両に設けられた凹部にモールを取り付けるためのモール取付用クリップ、および、モールの両端部を、凹部を形成する両側面へ弾接させるモール取付用クリップの取付構造に関するものである。

【０００２】

【従来の技術】従来のモール取付用クリップとして、車両の凹部を形成する側面、例えば主ルーフパネルまたはサイドルーフパネルに先端が当接する位置決め片を、凹部の底に接着、固定させる基板部の一側に設けたものが知られている。このモール取付用クリップは、位置決め片の先端を、凹部を形成する所定の側面へ当接させることにより、その側面から所定の位置に、すなわち凹部の幅方向の所定の位置に位置決めして接着、固定させることができる。

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【０００３】

【発明が解決しようとする課題】従来のモール取付用クリップは、位置決め片が基板部の一側に設けられているので、凹部を形成する一方の側面から所定の位置に位置決めして接着、固定させることができるものの、凹部の幅方向の中心（凹部のトップ面における幅方向の中心、凹部の開口縁における幅方向の中心）に接着、固定させることができなかった。すなわち、凹部の幅を一定にしようとしても、主ルーフパネルの端縁部とサイドルーフパネルの端縁部とを接合させるときに発生する接合誤差によって凹部の幅が一定しなくなるため、凹部を形成する一方の側面を基準にしてモール取付用クリップを凹部の底に接着、固定させても、モール取付用クリップを凹部の中心に位置させることができなくなる。

【０００４】このように、モール取付用クリップを凹部の中心に接着、固定させることができなければ、モールの両端部を主ルーフパネルおよびサイドルーフパネルに弾接させる場合、モールをモール取付用クリップに確実に係合させて取り付けることができなくなったり、モールの両端部を主ルーフパネルおよびサイドルーフパネルに弾接させることができなくなる。

【０００５】この発明は、上記したような不都合を解消するためになされたもので、凹部の幅方向の中心に、簡単に接着、固定させることのできるモール取付用クリップ、および、モールの両端部を、凹部を形成する両側面へ確実に弾接させることのできるモール取付用クリップの取付構造を提供するものである。

【０００６】

【課題を解決するための手段】この発明は、凹部の底に接着、固定される基板部に、モールを保持する保持部が設けられたモール取付用クリップにおいて、凹部を形成する対向した各側面に弾接する弾性片を、基板部の両側に設けたものである。そして、弾性片を基板部の両側にそれぞれ複数設けたり、弾性片に凹部の側面でガイドされるガイド面を設けたり、弾性片を基板部の両側に対で設けたり、弾性片の弾性力を一側側と他側側とで異ならせるのが望ましい。

【０００７】また、この発明のモール取付用クリップの取付構造は、モール取付用クリップを、凹部の底に接着、固定される基板部と、この基板部に設けられ、モールを保持する保持部と、基板部の両側に設けられ、凹部を形成する対向した各側面に弾接する弾性片とで構成し、弾性片を凹部の両側面へ弾接させながらモール取付用クリップを凹部内へ挿入し、基板部を凹部の底に接着、固定させたものである。

【０００８】

【発明の実施の形態】以下、この発明の実施形態を図に基づいて説明する。図１はこの発明の一実施形態であるモール取付用クリップの平面図、図２は図１に示したモ

ール取付用クリップの正面図、図３は図１に示したモール取付用クリップの底面図、図４は図１に示したモール取付用クリップの左側面図、図５は図１に示したモール取付用クリップの右側面図、図６は図１のＡ－Ａ線による断面図、図７は図１のＢ－Ｂ線による断面図、図８は図１のＣ－Ｃ線による断面図である。なお、モール取付用クリップの背面図は、正面図と左右対称になる。

【０００９】これらの図において、合成樹脂製のモール取付用クリップ２１は、平面視が長方形で、正面（背面）視が上方へ開放したコ字形状の基板部２２と、この基板部２２の内側の上端で、長辺方向〔長手方向（図１において上下方向）、後述する凹部１１の長手方向（後述する図９において前後方向）〕の両端よりも少し内側に、短辺方向〔短手方向（図１において左右方向）、凹部１１の短手方向（図９において左右方向）〕に対向させて対で一体的に設けられた保持部２３と、基板部２２の長辺方向の両端および中央に、外側へ向かいながら上昇するように、短辺方向に対向させて対で一体的に設けられた複数の弾性片２４Ａ，２４Ｂと、基板部２２の上面の中心に一体的に設けられた位置決め突起２５とで構成されている。

【００１０】上記した基板部２２には、保持部２３と対向する底の部分に金型を抜くための抜き孔２２ａと、位置決め突起２５の両側に位置して長手方向へ延び、位置決め突起２５を上下動可能とするための長孔２２ｂと、長手方向の一端（図１において上端）の短手方向の中央に長手方向へ突出させた目印用突出部２２ｃと、底の一側側（図２において右端）から所定の幅（底の全幅の半分よりも短い幅）で長手方向へ切り欠いた段部２２ｄとが設けられている。

【００１１】また、上記した各保持部２３は、上面が、後述するモール取付用ホルダ３１の被保持部３２を基板部２２の底側へ案内するように、内側へ下降する傾斜面（ガイド面）２３ａとされている。上記した弾性片２４Ａと弾性片２４Ｂとは、傾斜角を異ならせて弾性力を異ならせてある。そして、弾性片２４Ａ，２４Ｂの、凹部１１の側面（開口縁も含む。）に対応する側は、凹部１１の側面でガイドされるガイド面（傾斜面）とされている。

【００１２】図９は車両の凹部にモール取付用クリップを取り付ける説明図、図１０は車両の凹部に取り付けたモール取付用クリップにモール取付用ホルダおよびモールを取り付ける説明図である。

【００１３】これらの図において、モール取付用クリップ２１を取り付ける凹部１１は、主ルーフパネル１２の端縁部１２ａと、サイドルーフパネル１３の端縁部１３ａとを溶接することによって形成されている。そして、凹部１１の両側面は、主ルーフパネル１２と、サイドルーフパネル１３とによって形成され、傾斜角が異なっている。

【００１４】シール材１５は、主ルーフパネル１２の端縁部１２ａと、サイドルーフパネル１３の端縁部１３ａとの接合部分をシールするものである。接着材としての両面接着テープ２７は、凹部１１の底にモール取付用クリップ２１の基板部２２を接着、固定させるものである。

【００１５】合成樹脂製のモール取付用ホルダ３１は、モール取付用クリップ２１の保持部２３に保持される被保持部３２と、この被保持部３２の下面の中心に長手方向へ設けられ、後述するモール４１の被保持部４３を保持する保持部３３とで構成されている。上記した被保持部３２には、長手方向の下側の両側に被保持爪部３２ａが設けられ、底の中心にモール取付用クリップ２１の位置決め突起２５に対応させて位置決め凹部３２ｃが設けられている。

【００１６】そして、被保持爪部３２ａの長手方向の下側両端部は、上側へ拡開する傾斜面（ガイド面）３２ｂとされている。さらに、保持部３３の長手方向の下側両端部は、上側へ拡開し、被保持部３２まで達する傾斜面３３ａとされている。このモール取付用ホルダ３１の長手方向の長さは、モール取付用クリップ２１と同じ長さとされている。なお、モール取付用ホルダ３１は、左右対称に成形されている。

【００１７】合成樹脂製の、凹部１１を覆うモール４１は、両端縁が凹部１１を形成する主ルーフパネル１２またはサイドルーフパネル１３に弾接するモール部４２と、このモール部４２の下面の中心に長手方向へ設けられ、モール取付用ホルダ３１の保持部３３に保持される被保持部４３とで構成されている。上記した被保持部４３には、長手方向の下側の両側に被保持爪部４３ａが設けられている。そして、被保持爪部４３ａの長手方向の下側両端部は、上側へ拡開する傾斜面（ガイド面）４３ｂとされている。なお、モール４１は、長尺で、左右対称に成形されているが、被保持部４３を必要個所にのみ設けてもよい。

【００１８】次に、モール４１の取付について説明する。まず、モール取付用クリップ２１の取付について説明すると、モール取付用クリップ２１の底の一段と低い面（段部２２ｄを形成する面と異なる面）に両面接着テープ２７の一面を接着させる。なお、両面接着テープ２７の幅は、この両面接着テープ２７を接着させる面と同一幅とされている。

【００１９】そして、図９に二点鎖線で示すように、主ルーフパネル１２側に弾性片２４Ａを位置させるとともに、サイドルーフパネル１３側に弾性片２４Ｂを位置させる。次に、基板部２２を凹部１１の底と平行にし、モール取付用クリップ２１を凹部１１内へ挿入すると、主ルーフパネル１２に弾性片２４Ａがガイド面でガイドされながら弾接するとともに、サイドルーフパネル１３に弾性片２４Ｂがガイド面でガイドされながら弾接するの

で、モール取付用クリップ２１を凹部１１内へ挿入することができる。

【００２０】このように、モール取付用クリップ２１を凹部１１内へ挿入すると、主ルーフパネル１２とサイドルーフパネル１３との傾斜角に対応させて基板部２２が凹部１１の幅方向の中心に位置するように、弾性片２４Ａ，２４Ｂの弾性力を異ならせてあるので、図９に実線で示すように、基板部２２を凹部１１の幅方向の中心に位置させ、接着、固定させることができる。

【００２１】次に、図１０に二点鎖線で示すように、位置決め凹部３２ｃを位置決め突起２５に対応させ、モール取付用ホルダ３１の被保持部３２をモール取付用クリップ２１の保持部２３の間へ押圧すると、被保持爪部３２ａは傾斜面２３ａ，３２ｂで案内され、保持部２３を拡開させながら保持部２３を乗り越え、また、位置決め突起２５は位置決め凹部３２ｃ内に入って係合するとともに、被保持部３２の底に当接する。

【００２２】このように、被保持爪部３２ａが保持部２３を乗り越えると、基板部２２が自身の弾性で元の状態に復帰し、保持部２３が被保持爪部３２ａに係合するので、モール取付用ホルダ３１をモール取付用クリップ２１に保持させることができる。このとき、位置決め凹部３２ｃ内に位置決め突起２５が入って係合するので、モール取付用ホルダ３１は、モール取付用クリップ２１の長手方向へ移動しないように位置決めされる。

【００２３】次に、図１０に二点鎖線で示すように、被保持部４３を保持部３３の間に対応させてモール４１を押圧すると、被保持爪部４３ａは傾斜面４３ｂで案内され、保持部３３を拡開させながら保持部３３を乗り越える。このように、被保持爪部４３ａが保持部３３を乗り越えると、保持部３３が自身の弾性で元の状態に復帰し、被保持爪部４３ａに係合するので、図１０に実線で示すように、モール４１をモール取付用ホルダ３１に保持させることができる。このとき、モール部４２の両端縁は凹部１１の両側面（主ルーフパネル１２およびサイドルーフパネル１３）に弾接し、凹部１１を覆うとともに、凹部１１をシールする。

【００２４】上記したように、この発明の一実施形態によれば、弾性片２４Ａ，２４Ｂを基板部２２の両側に、凹部１１の長手方向に対応させて設けたので、弾性片２４Ａ，２４Ｂが凹部１１の両側面に弾接することにより、凹部１１の幅方向の中心に、凹部１１の長手方向に沿ってモール取付用クリップ２１を簡単に接着、固定させることができる。そして、弾性片２４Ａ，２４Ｂを基板部２２の両側に複数設けたので、複数の弾性片２４Ａ，２４Ｂが凹部１１の両側面に弾接することにより、凹部１１の幅方向の中心に、凹部１１の長手方向に沿ってモール取付用クリップ２１を簡単に接着、固定させることができる。

【００２５】また、弾性片２４Ａ，２４Ｂを基板部２２の両側に対で設けたので、凹部１１の幅方向の中心に、モール取付用クリップ２１を確実、かつ、簡単に接着、固定させることができる。そして、弾性片２４Ａと弾性片２４Ｂとの弾性力を異ならせたので、凹部１１を形成する両側面が左右対称でない場合においても、弾性片２４Ａ，２４Ｂの弾性力を両側面の傾斜に対応させて異ならせることにより、凹部１１の幅方向の中心に、モール取付用クリップ２１を簡単に接着、固定させることができる。また、弾性片２４Ａ，２４Ｂに凹部１１の側面でガイドされるガイド面を設けたので、ガイド面を凹部１１の側面に当接させることにより、モール取付用クリップ２１を凹部１１内へスムーズに挿入させることができる。

【００２６】さらに、基板部２２に目印用突出部２２ｃを設けたので、モール取付用クリップ２１を凹部１１内へ方向を間違えないように挿入して接着、固定させることができる。また、モール取付用クリップ２１に位置決め突起２５を設け、この位置決め突起２５が係合する位置決め凹部３２ｃをモール取付用ホルダ３１に設けたので、モール取付用ホルダ３１をモール取付用クリップ２１に移動しないように位置決めして取り付けることができる。

【００２７】上記した実施形態において、複数対の弾性片２４Ａ，２４Ｂを基板部２２の両側に設けた例を示したが、弾性片２４Ａ，２４Ｂは１つずつであっても、また、弾性片２４Ａ，２４Ｂを対で設けなくても、凹部１１の幅方向の中心に、モール取付用クリップ２１に位置決めして接着、固定させることができる。また、弾性片２４Ａと弾性片２４Ｂとの弾性力を異ならせるために傾斜角を異ならせた例を示したが、弾性片２４Ａと弾性片２４Ｂとの肉厚を異ならせることにより、弾性力を異ならせてもよい。

【００２８】さらに、弾性片２４Ａと弾性片２４Ｂとの弾性力を異ならせた例を示したが、凹部１１の両側面が左右対称である場合は、弾性片２４Ａ，２４Ｂとの弾性力を同じにすることにより、凹部１１の幅方向の中心に、モール取付用クリップ２１に位置決めして接着、固定させることができる。また、モール取付用ホルダ３１を介してモール取付用クリップ２１にモール４１を取り付ける例を示したが、モール取付用クリップ２１にモール４１を直接取り付ける構成であってもよい。

【００２９】

【発明の効果】以上のように、この発明のモール取付用クリップによれば、弾性片を基板部の両側に設けたので、弾性片が凹部の両側面に弾接することにより、凹部の幅方向の中心に、凹部の長手方向に沿ってモール取付用クリップを簡単に接着、固定させることができる。そして、弾性片を基板部の両側に複数設けたので、複数の弾性片が凹部の両側面に弾接することにより、凹部の幅方向の中心に、凹部の長手方向に沿ってモール取付用ク

リップを簡単に接着、固定させることができる。

【００３０】また、弾性片に凹部の側面でガイドされるガイド面を設けたので、ガイド面を凹部の側面に当接させることにより、モール取付用クリップを凹部内へスムーズに挿入させることができる。そして、弾性片を基板部の両側に対で設けたので、凹部の幅方向の中心に、モール取付用クリップを確実、かつ、簡単に接着、固定させることができる。また、弾性片の弾性力を一側側と他側側とで異ならせたので、凹部を形成する両側面が左右対称でない場合においても、弾性片の弾性力を両側面の傾斜に対応させて異ならせることにより、凹部の幅方向の中心に、モール取付用クリップを簡単に接着、固定させることができる。

【００３１】また、この発明のモール取付用クリップの取付構造によれば、弾性片を凹部の対向した両側面へ弾接させながらモール取付用クリップを凹部内へ挿入し、基板部を凹部の底に接着、固定させたので、凹部の幅方向の中心に、モール取付用クリップを簡単に接着、固定させることができる。

【図面の簡単な説明】

【図１】この発明の一実施形態であるモール取付用クリップの平面図である。

【図２】図１に示したモール取付用クリップの正面図である。

【図３】図１に示したモール取付用クリップの底面図である。

【図４】図１に示したモール取付用クリップの左側面図である。

【図５】図１に示したモール取付用クリップの右側面図である。

【図６】図１のＡ－Ａ線による断面図である。

【図７】図１のＢ－Ｂ線による断面図である。

【図８】図１のＣ－Ｃ線による断面図である。

【図９】車両の凹部にモール取付用クリップを取り付ける説明図である。

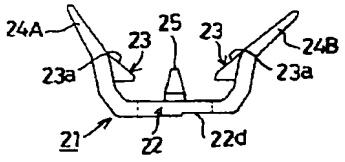
＊【図１０】車両の凹部に取り付けたモール取付用クリップにモール取付用ホルダおよびモールを取り付ける説明図である。

【符号の説明】

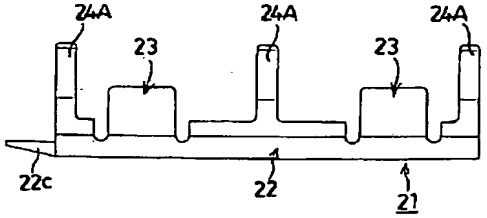
１１	凹部
１２	主ルーフパネル
１２ａ	端縁部
１３	サイドルーフパネル
１３ａ	端縁部
１５	シール材
２１	モール取付用クリップ
２２	基板部
２２ａ	抜き孔
２２ｂ	長孔
２２ｃ	目印用突出部
２２ｄ	段部
２３	保持部
２３ａ	傾斜面
２４Ａ	弾性片
２４Ｂ	弾性片
２５	位置決め突起
２７	両面接着テープ
３１	モール取付用ホルダ
３２	被保持部
３２ａ	被保持爪部
３２ｂ	傾斜面
３２ｃ	位置決め凹部
３３	保持部
３３ａ	傾斜面
４１	モール
４２	モール部
４３	被保持部
４３ａ	被保持爪部
４３ｂ	傾斜面

＊

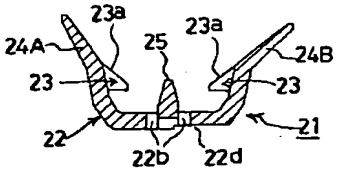
【図２】



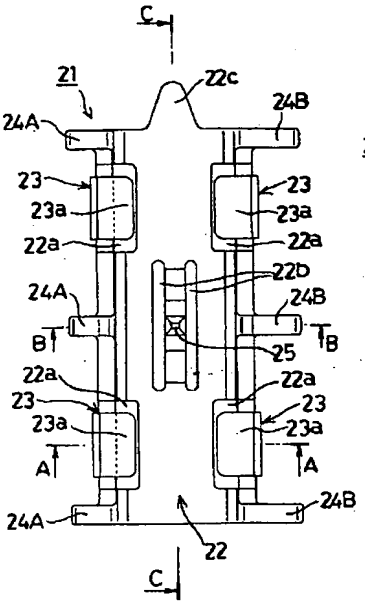
【図４】



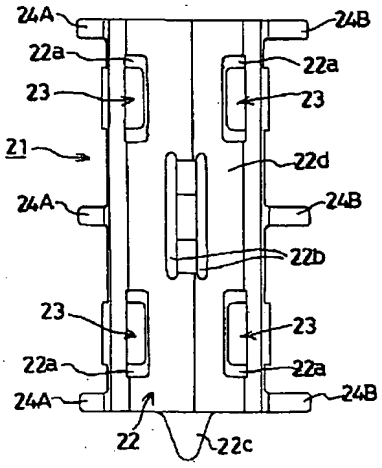
【図７】



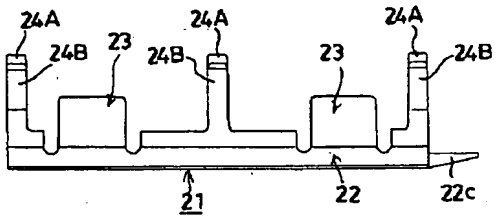
【図１】



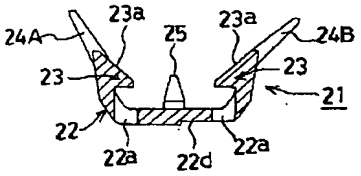
【図３】



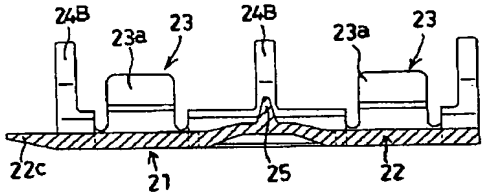
【図５】



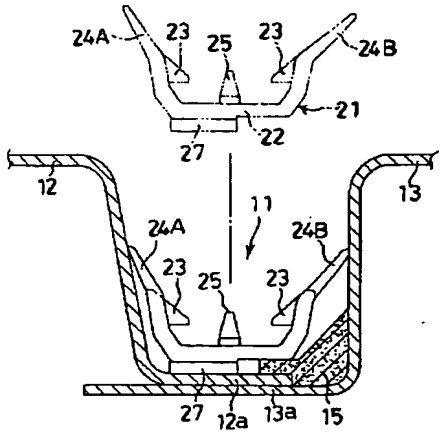
【図６】



【図８】



【図９】



【図１０】